



ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

Ron Fuller, Chief Electrical Inspector

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● Electrical Board Recruitment For Three Positions

There are currently three board positions vacant or up for re-appointment in July 2006. The three positions are: electrician, general public, and telecommunication provider. Applications must be received, by the Governor, no later than March 15, 2006. The Governor is placing emphasis on achieving greater ethnic, gender and geographic balance on the Electrical Board. Applications must be made, to the Governor's office using the *Application for Gubernatorial Appointment to a Board or Commission* form. Requests for copies of the application and any questions may be directed to Christina Pourarien at (360) 902-5259 or downloaded at:

<http://www.governor.wa.gov/actions/appointments/boards/>

Applicants should submit a letter of interest, completed application form, current resume, and letters of recommendation to the Governor's office (Office of the Governor, Attn: Shana Melanson, PO Box 40002, Olympia, WA 98504-0002).

● Electrical-Compliance, Outreach, Regulation and Education (E-CORE) Team

The new Electrical-Compliance, Outreach, Regulation & Education (E-CORE) team is just completing training. The E-CORE team will focus on reducing the effects of the underground economy on legitimate electrical contractors and electricians and the importance of getting inspections. The E-CORE team will operate across the state coordinating with contractors, local inspectors and city jurisdictions to achieve maximum effectiveness.

The E-CORE team will focus on contractors' concerns with the underground economy (i.e. unlicensed electrical contractors, uncertified electricians, and those who fail to get electrical permits). E-CORE will also make referrals to other department programs for violations of the general contracting, industrial insurance, and jobsite safety laws.

The E-CORE team hopes to receive good referrals from contractors and electricians competing with firms and individuals who are operating out of compliance. If you have verifiable information of unfair competition, illegal activities, or illegal work in progress, contact an E-CORE team member.

You can contact an E-CORE team member at:

- Supervisor, Faith Jeffrey, <mailto:scfa235@lni.wa.gov>
- Puget Sound and NW Washington, Ken Copeland <mailto:copk235@lni.wa.gov> or (206) 835-1130
- SW Washington, Charles Brinkmeyer <mailto:bric235@lni.wa.gov> or (360) 896-2327
- Eastern Washington, Phil Jordan <mailto:jorp235@lni.wa.gov> or (509) 324-2611

You will increase the chances for a successful investigation if you e-mail an E-CORE team member a completed *Electrical Inspection Witness Statement* (form [F500-087-000](#)) or *Investigation Report* (form [F500-076-000](#)) available on our Web site at:

<http://www.lni.wa.gov/TradesLicensing/Electrical/FormPub>

● Online Permit Applications – Look For Changes

Some changes are coming to the Electrical Permitting and Inspection System (EPIS) application for contractors using the "user name password" function. In March 2006 we will be changing the EPIS logon method. We will begin using Washington's centralized Secure Access Washington (SAW) system.

Why are we moving to Secured Access Washington (SAW)? Secure Access Washington is the State of Washington site that provides users the ability to use one user name and password to access all online services offered by state agencies.

What does this mean? You will have to subscribe to SAW to continue using the Electrical Permits and Inspections Systems (EPIS). The one ID and password will give you access to all state online services.

How do I prepare for the change? Until you receive the prompt in March, **you do not have to do anything.**

How will I change my ID and password? In March you will log into the EPIS application and be prompted with information on how to subscribe to the SAW system. You will be directed to the SAW site where you will create your new user ID and password for the use in EPIS. You may be asked to create a user ID if the one you have is not available for use in SAW. The requirements for user names and passwords are similar to those used in most other online services. (This would be a combination of upper case and lower case letters and numbers or special characters.)

What happens if I don't subscribe to SAW? Users will have 30 days to join the SAW system. At that time, you will no longer be able to access the EPIS secured access site unless you have a SAW ID and password.

If you have any questions regarding these changes, you may contact Phyllis Cooper, Information Technology Specialist, at <mailto:tayp235@lni.wa.gov> or (360) 902-5293.

● Installation of Pre-Manufactured Heat Mats

Placing pre-manufactured heat mats in tile grout has been added to Class A basic electrical work (i.e. work that doesn't require a permit). This rule change became effective November 25, 2005. WAC 296-46B-900(8)(D) says: "*Embedding pre-manufactured heat mats in tile grout where the mat is listed by an approved testing laboratory and comes from the manufacturer with pre-connected lead-in conductors. All listing marks and lead-in conductor labels must be left intact and visible for evaluation and inspection by the installing electrician and the electrical inspector.*" **Placing pre-manufactured heat mats is considered a Class A electrical installation.**

The installer does not have to be a certified electrician or an electrical trainee under supervision to place the pre-manufactured heat mat in tile grout (e.g. a tile setter). However, **the connections of the cable leads to the controlling device must be done by a licensed electrical contractor using a certified electrician.** An electrical permit and inspection is required for the electrical work.

The field installation of other single-wire heat cables (or any mats that require field-connection of the non-heating leads) is an electrical installation and must be done by an electrician under a permit and inspection prior to covering.

● Sealing Locknuts and Conduit Fittings

NEC 312.2(A) requires enclosures installed in wet locations be weatherproof. Raceways or cables entering these enclosures **above the level of uninsulated live parts** must use fittings listed for wet locations. Watertight connections are necessary (and required) in areas when gravity could lead water directly into live parts. Fittings supplied with a weatherproof enclosure by the manufacturer are approved for the intended use. Field-installed weatherproof hubs (i.e. Myers hubs) are expensive and many installers opt for sealing locknuts to maintain the weatherproof integrity of the enclosure.

Sealing locknuts are intended for use with **threaded rigid metal conduit and intermediate metal conduit only.** On a conduit entering perpendicular to the enclosure surface they are to be installed with one sealing locknut on the outside or the inside with an ordinary locknut or sealing locknut on the opposite side of the enclosure to maintain the weatherproof integrity. **Rigid nonmetallic conduit (PVC) terminal adapters are not suitable for use with sealing locknuts.** PVC entries into weatherproof enclosures above the level of uninsulated live parts must be made with fittings listed for the purpose.

● Electrical Question of the Month

This Month's Question: The minimum ampacity for circuit conductors supplying a varying duty pump motor with a 30-minute duty rating shall be sized based on what percentage of the motor nameplate current? **A) 150%, B) 125%, C) 115%, D) 100%.**

Last Month's Question: Where electrical equipment is installed to obtain a series combination rating, the identification plate must be substantially what color? **A) Green, B) Orange, C) Yellow, D) Red.** The answer is: **C)** [WAC 296-46B 110(4)]